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INTERNATIONAL STANDARD

ISO/IEC 13235-1

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Information technology — Open Distributed Processing — Trading function: Specification

*Technologies de l'information — Traitement distribué ouvert — Fonction
commerciale: Spécifications*



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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

International Standard ISO/IEC 13235-1 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 33, *Distributed application services*, in collaboration with ITU-T. The identical text is published as ITU-T Recommendation X.950.

ISO/IEC 13235 consists of the following parts, under the general title *Information technology — Open Distributed Processing — Trading function*:

- *Part 1: Specification*
- *Part 2: (TBD)*
- *Part 3: Provision of trading function using OSI Directory service*

Annexes A to D form an integral part of this part of ISO/IEC 13235.

Introduction

The rapid growth of distributed processing has led to a need for a coordinating framework for the standardization of Open Distributed Processing (ODP). The Reference Model of Open Distributed Processing (RM-ODP) provides such a framework. It defines an architecture within which support of distribution, interoperability and portability can be integrated.

One of the components of the architecture (described in RM-ODP Part 3: Architecture) (ITU-T Rec. X.903 | ISO/IEC 10746-3) is the ODP Trading function. The trading function provides the means to offer a service and the means to discover services that have been offered. This Recommendation | International Standard provides an architecture for systems implementing the trading function and the specification of interfaces within the architecture.

NOTE – The specification of computational interfaces in this Recommendation | International Standard is technically aligned with the OMG Trading Object Service.

The goals of this Recommendation | International Standard are:

- to provide a standard which is independent of any implementation;
- to ensure implementations are capable of being made to interoperate (i.e. can be federated);
- to provide sufficient detail to allow conformance claims to be assessed.

Annex A is a normative ODP-IDL specification of the trading function interface signatures.

Annex B is a normative specification of the ODP trading function constraint language.

Annex C is a normative specification of the ODP trading function constraint recipe language.

Annex D is an informative description of a Service Type Repository.

ITU-T RECOMMENDATION

INFORMATION TECHNOLOGY – OPEN DISTRIBUTED PROCESSING – TRADING FUNCTION: SPECIFICATION

1 Scope and field of application

The scope of this Recommendation | International Standard is:

- an enterprise specification for the trading function;
- an information specification for the trading function;
- a computational specification for traders (i.e. objects providing the trading function);
- conformance requirements in terms of conformance points.

It is not a goal of this Recommendation | International Standard to state how the trading function should be realized. Therefore this Recommendation | International Standard does not include an engineering specification.

The field of application for this Recommendation | International Standard is any ODP system in which it is required to introduce and discover services incrementally, dynamically and openly.

2 Normative References

The following Recommendations and International Standards contain provisions which, through reference in this text, constitute provisions of this Recommendation | International Standard. At the time of publication, the editions indicated were valid. All Recommendations and Standards are subject to revision, and parties to agreements based on this Recommendation | International Standard are encouraged to investigate the possibility of applying the most recent edition of the Recommendations and Standards listed below. Members of IEC and ISO maintain registers of currently valid International Standards. The Telecommunication Standardization Bureau of the ITU maintains a list of currently valid ITU-T Recommendations.

- ITU-T Recommendation X.901 (1997) | ISO/IEC 10746-1:1998, *Information technology – Open distributed processing – Reference Model: Overview.*
- ITU-T Recommendation X.902 (1995) | ISO/IEC 10746-2:1996, *Information technology – Open Distributed Processing – Reference Model: Foundations.*
- ITU-T Recommendation X.903 (1995) | ISO/IEC 10746-3:1996, *Information technology – Open Distributed Processing – Reference Model: Architecture.*
- ITU-T Recommendation X.920 (1997) | ISO/IEC 14750:1998, *Information technology – Open Distributed Processing – Interface Definition Language.*
- ISO/IEC 13568¹⁾, *Information technology – The Z Specification Language.*